

REMARKS

The FINAL Office Action dated January 27, 2010 has been received and its contents carefully noted. Claims 1-11 were pending and claims 1-6 and 8-11 rejected while claim 7 is merely objected to. Applicants wish to thank the Examiner for the continued favorable indication of the allowability of claim 7. Applicants also thank the Examiner for extending the courtesy of a brief telephonic interview to discuss a continued rejection of claim 11 under 35 U.S.C. §101. Reference may be made, herein, to U. S. Patent Application Publication US 2009/0201936 for paragraph numbers which represents the publication of the present application, U.S.S.N. 10/585,534 for the convenience of the Examiner and Applicants.

By this Response, all of the pending claims 1-11 have been amended and claim 12 has been added. Claims 1-11 have been generally amended to place them in better form for examination. For example, claims 8 (a local gateway) and 10 (method) have been written in proper independent claim form. Claims 1-2, 4, 6 and 10 have also been amended to clarify previously recited “synchronizing data” as first and second synchronizing data and to clarify first and second communication networks. Claims 8 and 9 have been amended to clarify recited clocks. Claim 11 has been amended to explicitly recite “non-transitory” storing space.

Claim 12 has been added to recite that “said cached, intercepted message (MSG) comprises an HTTP information request directed to a data server of the first communication network.” Claim 12 is supported, for example, by the paragraph of the specification at page 5, lines 10-21, “when a user requests information from the external network, preferably via the HTTP protocol (for “HyperText Transfer Protocol”)” (our emphasis added) and page 12, lines 12-15 and 25-27: “The WAN 5 is notably coupled with a data server 7, able to send information to apparatus Ai of the LAN 4 under request” and “an intercepting unit 13 provided for intercepting a message MSG coming from any of the apparatus Ai of the LAN 4 and directed to the WAN 5, for example addressed to the data server 7,” (our emphasis added) respectively. Also, see FIG. 1 for data server 7 of WAN 5, FIG. 2 for MSG,

intercepting 13 and forwarding 16 and FIG. 3, for example, S2 Request Information, S3 Cache Request, and S7-S9, Forward and Return Information.

For the amendment to claim 1 re caching, see FIG. 3, S3 – Cache Request. For “periodically” and “state of said local time clock of said router,” see, for example, for “periodically,” paragraph [0034] beginning, “Advantageously . . .” at page 8, line 1 and for “state of said local time clock,” see [0083], page 14, lines 15-21, “if time information related to the local clock CL0 is not yet complete or is considered as obsolete, the home gateway does not forward immediately the message MSG to the external network 5,” (our emphasis added); thus, the preparing of a time request, FIG. 2 RQ and FIG. 3, S4 and caching S3 occur periodically or responsive to a state of the local clock CL0. The amendments to the claims will be further discussed below.

Amendments to the Specification

The specification has been amended at page 11 to clarify the language of the specification and claim 11 amended similarly. No prohibited new matter has been added by adding the word “non-transitory” to the specification (or to claim 11). The specification contains a description of program storing space, “such as a diskette or a cassette” which is “non-transitory.”

Page 12, lines 11-16, have been amended to conform to paragraph [0024] of US 2009/0201936, the paragraph beginning at page 5, line 30 and extending to page 6, line 2, wherein it is stated: “In a particular embodiment, one of the networks has a single apparatus, consisting for example in a home network with only one PC, connected to the Internet via a modem” (our emphasis added). Thus, the replacement of “is” with “may be” recognizes the single apparatus embodiment as well as a plural apparatus embodiment, where i is greater than 1. All claim and specification amendments and support for amended claims and the amended specification can be found in the application as originally filed.

Claim Objections

An objection was made to claim 10. The Examiner notes that “synchronizing data” is from a “second” network (step S1); yet, later in the claim “said synchronizing data”

appears to be from apparatus that is a point of the first communication network according to claim 1 (step S5). The Examiner requests “appropriate correction.”

Claims 1 and 10 relate to three separate clocks. The router/gateway has a “local time clock,” for example, shown in the drawings as CL0; a timeserver 8 of the first communication network (WAN) has a global “reference time clock” shown in the drawings as GCL from which first synchronizing SYNC data is provided as S1 – Set absolute time of FIG. 3. According to FIG. 1 and FIG. 3, an apparatus Ai of a LAN 4, being a point of the second network, has a “specific time clock” shown in the drawing as CL1 for apparatus A1 and so on if there is more than one apparatus in a LAN 4. As the Examiner correctly indicates, FIG. 3, S5 relates to second SYNC data returned to router/gateway from an apparatus Ai of a second communication network.

Consequently, the Examiner is correct that the same synchronizing data (for example, SYNC, may not come from different claimed elements of different communication networks. The claims have been thus clarified to refer to first and second synchronizing data to correct the recited “synchronizing data,” where “first synchronizing data,” for example, per S1, may be from a global “reference time clock” of the “first communication network,” for example, a WAN, while, as the Examiner correctly points out, the “time request” and newly recited “second synchronizing data” relate to S5 – Execute Script and Return Time Info and, for example, a home computer Ai, a point of a second communication network, and its “specific time clock” exploited for synchronizing router/gateway local clock CL0 periodically or responsive to its state per S6 – Set Time Info.

Applicants thus believe that by clarifying “first synchronizing data based on a reference time clock from said first communication network” and “second synchronizing data based on said specific time clock to be obtained from said apparatus of said second communication network” that they have overcome the objection to claim 10 (and clarified claim 1).

Dependent claims 2, 4 and 6 have been likewise corrected to properly reflect, for example, “second synchronizing data” and identify respective clocks and communication networks as well.

Claim Rejections – 35 USC §101

The Examiner has rejected claim 11 as directed to non-compliant subject matter. Referring to Page 2, paragraph 3, and continuing to the top of Page 3, the Examiner has rejected claim 11 as follows: “the claimed computer readable medium . . . is not clearly defined to exclude non-statutory transitory media such as signals or transmission media.” At page 9, the Examiner states “the office views any computer readable medium or storage device as non-statutory subject matter since computer readable medium could be implicitly viewed as signals or transmission media. Thus, computer readable medium or storage device will need state that it’s non-transitory, to overcome the 101 rejection.” Consequently, the specification and claim 11 have been amended to include the word “non-transitory” before “storing space” to so exclude transitory media.

These amendments do not represent new matter because the test for new matter is obviousness. It would be obvious to one of ordinary skill in the art that the referred-to “storing space,” for example, for storing computer programs is non-transitory by nature, sometimes referred to in the arts as a program memory or program store and may be exemplified by “a diskette or a cassette.”

Claims Rejections – 35 U.S.C. § 102

Claims 1, 4-6 and 10-11 stand rejected as being anticipated by Heitmann (US 7,190,703; hereinafter, Heitmann). The claims have been amended to clarify first and second synchronizing data and a relationship among an intercepting (means), a preparing (means) and a forwarding (means), respective clocks and first and second communication networks. The rejection as to claims 1, 4-6 and 10-11 is respectfully traversed in view of the amendments to the claims. In short, Heitmann, for example, shows no intercepting (means) in combination with recited preparing (means) “responsive to a state of said local time clock of said router” wherein a “caching of the at least one message” results such that the forwarding (means) forwards “said cached, intercepted message (MSG) to said first communication network after the preparing (means) has prepared said time request,” with the further clarification of first and second networks.

The difference between the “after” recitation of claim 1 and the recitation of “only after” in claim 4/1 may be explained. Referring to paragraph [0032] of US 2009/0201936 and the paragraph beginning at page 7, line 15, the different embodiments are explained. FIG. 3, for example, does not specifically show when a cached, intercepted information request or message (MSG) is forwarded. Paragraph [0032] describe two embodiments, one when an intercepted message is forwarded “as soon as the time request has been prepared” and another in which the intercepted message is forwarded “only after the exploiting means have exploited the synchronizing data obtained from the apparatus by means of the time request.” Claim 1 “after” is supported by the former while claim 4/1 is supported by the latter.

It is respectfully submitted that Heitmann shows neither feature. Heitmann updates base station clocks whenever a seamless handover is required between adjacent base stations BS1 and BS2. Thus, there is no “periodically” or “responsive to a state of said local time clock” feature. The KD1 (or KD2) communication data, such as voice, are forwarded when BS1 and BS2 have both sent time requests to a LAN VE clock RTC. This process is discounted by the first steps of the present independent claims where SYNC is obtained from a first communication network. An advantage of the embodiments is the obtaining of SYNC, not from an external network represented by switch VE and clock RTC but from apparatus of a second communication network or LAN, such as a personal computer, and its specific time clock CLI.

It is the Examiner’s position that Heitmann intercepts a message KD1 (Page 3 of the Office Action) which is seen in FIG. 1 from FN, to VE, to LAN, to BS1 and handed-off to terminal EG1, where FN is landline network, VE is a switching device with an RTC (real time clock), BS is a base station and EG is a mobile terminal. KD1 is communications data, such as voice data, not time information or an information request message. KD1 is headed in the direction of mobile terminal EG1 so that there may be hand-off between BS2 and BS1. The claims prepare a time request, for example, toward a second communication network apparatus for receiving SYNC, analogous to a terminal EG1. There is no suggestion of obtaining SYNC from a terminal EG1 in Heitmann.

The Examiner points to col. 5, lines 55-67 and col. 6, lines 1-15 and 43-60 for support, for example, that intercepting means . . . and forwarding . . . as well as respective receiving, exploiting, preparing and sending elements of these claims are anticipated by Heitmann.

It is respectfully submitted that Heitmann deals with synchronizing base stations of a mobile communication network to enable a seamless handover of mobile apparatus between mobile base stations. The base stations synchronize to synchronizing switching device VE and in particular to the real time clock RTC where BS1 has a clock CLK (as would BS2). Heitmann neither shows nor suggests any third clock of any apparatus of a second communication network as recited.

There may be an analogy of Heitmann's RTC to the present GCL and of Heitmann's CLK to the present local time clock CL0. The claims, however, call for a third clock, "specific time clock" of recited "apparatus," for example, clock CL1 of apparatus A1 of a second communication network of which Heitmann is silent. It is the "specific time clock," for example, CL1 of apparatus A1 of a second communication network, that Heitmann does not mention. Consequently, it is respectfully submitted, for example, that Heitmann fails to disclose or suggest "preparing (means) for preparing a time request for said apparatus of said second communication network periodically or responsive to a state of said local time clock of said router." Heitmann has no such preparing (means). Moreover, Heitmann has no intercepting (means) "for intercepting at least one message (MSG) coming from an apparatus of the second communication network and directed to the first communication network, the apparatus of the second communication network having a specific time clock." Again, Heitmann is silent about such a specific time clock.

Now that the claims define receiving of first synchronizing data based on a reference time clock from a first communication network, the Examiner may be unable to identify a clock and preparing a time request as presently recited. Heitmann only describes BS1 and BS2 obtaining RTC clock for a base station hand-off, for example, of a voice call. Moreover, for example, Heitmann fails to disclose or suggest "forwarding (means) for forwarding said cached, intercepted message (MSG) to said first communication network

after the preparing (means) has prepared the time request.” Heitmann’s base stations BS1 and BS2 have no such forwarding in such a direction.

Beginning at Hetimann, col. 5, line 57, it is described, for example, that a clock transmitter ZTG resides in base station BS1; (see, for example, FIG. 2) requiring synchronization with BS2. Consequently, a clock adjustment device ZJ of the base station (FIG. 2) outputs a time request message ZA1 via LAN to switching device VE with real-time clock RTC. Then, VE responds to the request as follows: “The time information ZI1 is passed on from the network interface NS for the base station BS1 to the receiving device EE, where the time information ZI1 is extracted from a data stream which is received via the local area network LAN and also contains the communications data KD1.” The data stream comprises time information ZI1 (requested via ZA1) and KD1 (which is passing-through communications data, “such as voice data”). KD1 is thus communications data and not time information data or time request data headed for terminal mobile EG1. Moreover, there is no first and second communication network, only LAN, involved in the time requests ZA1 and ZA2 and no third clock from which SYNC is obtained.

Base station BS1 or BS2 request the time data from switch VE of one communication network and receives it. It is that simple. The Heitmann time requests, however, suffer from the disadvantages that the present embodiments avoid, for example, the ability to reflect a proper time zone or daylight savings time.

Heitmann has no intercepting, preparing and forwarding as recited. At Heitmann, col. 6, lines 43-59, it is clear that the communications data KD1 is passed on to a terminal EG1, but there is no time request of terminal EG1 where a true local time would likely reside with proper time zone and considering whether or not it is daylight savings time: “The communications data KD1 that has been temporarily stored in the input buffer store EP is read from this buffer store on the basis of the bit clock BT supplied from the clock transmitter ZTG, and is supplied to the DECT radio station DECT. Finally, from there, the communications data KD1 is transmitted without wires to the mobile terminal EG1.” There is no relationship between KD1 and a state of any apparatus specific time clock as recited.

Heitmann, col. 7, lines 48-53, reinforce the separation of time information ZI1 from communications data KD1 and that only LAN is involved: “Although the transmission of

time information ZI1, ZI2 and of the communications data KD1, KD2 via the local area network LAN is not time-transparent, the present invention allows adjacent base stations BS1 and BS2 to be synchronized with sufficient accuracy for seamless handover processes.” Consequently, it seems clear that Heitmann operates in a manner whereby base station requests for time information are responded to by switch VE of one communication network in an analogous manner to a present embodiment S1 request for time from the one (first) communication network. Communications data KD is passing-through data from switch VE to be relayed by both BS1 and BS2 as EG1 moves into BS1 territory requiring hand-over. Heitmann bears no similarity to claims 1, 8 or 10 as amended. Reconsideration and withdrawal of the rejection of independent claims 1 and 10 are respectfully requested.

Claim 4/1 is allegedly anticipated by Heitmann, column 6, lines 24-35 and 43-60. Claim 4 is patentable for at least the reasons that the features of claim 1 are patentable. The Examiner here admits that ZTG is based on ZI1 but fails to recognize that KD1 is communications information different from requested time information ZI1. Claim 4 reads: “said forwarding means is intended to forward said intercepted message to said first communication network only after the exploiting means has exploited said second synchronizing data obtained from said apparatus by means of said time request,” (our emphasis added). The Examiner and Heitmann are silent about what constitutes a second communication network or a third time clock of apparatus of the second communication network. The recited time request is of apparatus of the second communication network, while Heitmann is a simple time request of switch VE’s clock RTC of a first communication network.

The Examiner has also rejected claim 5/1. The Examiner’s rejection of claim 5/1 is equally silent about the claim elements wherein the Examiner relies on the Heitmann citation relied on for claim 4 and world time information being time zone information. Heitmann states that VE “has a GPS receiver GPS for receiving world time information from a satellite SAT.” This is not a suggestion of preparing “said time request for getting at least one of synchronizing local data time zone and daylight saving time information.” See paragraph [0032] where the advantage is explained that a “specific time clock” may provide the hour and not mere “world time information” and paragraph [0038] where “in a LAN, all

apparatus thereof should probably have the same time zone and daylight saving time.”
Reconsideration and withdrawal of the rejection of claims 4 and 5 are respectfully requested.

Claim 6 has been likewise amended to read “periodically updating said second synchronizing data based on said specific time clock to synchronize said local time clock.”
Consequently, claim 6 is not anticipated for at least the reasons that claim 1 is patentable and because Heitmann is silent about the features of, for example, the specific time clock of claim 6. Reconsideration and withdrawal of the rejection of claim 6 is respectfully requested.

Claim 11 is patentable for the same reasons that claim 10, as amended similarly to claim 1, is patentable. Reconsideration and withdrawal of the rejection of claim 11 is respectfully requested.

Claims Rejections – 35 U.S.C. § 103

At Page 5, the Examiner rejects claims 2 and 8-9 as being unpatentable over Heitmann in view of Godfrey et al. (US2004/0205330; hereinafter, Godfrey). At Page 7, the Examiner rejects claim 3/1 as unpatentable over Heitmann in view of newly cited Burkes et al. (US 6,915,353; hereinafter, Burkes).

Claim 2 has been amended to clarify second synchronizing data and claim 8 has been amended to clarify “said apparatus of said first communication network and having said specific time clock.” Claims 2 and 8 are patentable at least for the reasons that claim 1 is patentable because Heitmann suggests no “specific time clock” as recited. The Examiner also admits that Heitmann “fails to disclose local gateway intended to be arranged between a LAN and a WAN and to enable communication in both directions between the LAN and the WAN; a LAN interface for communication with the LAN, a WAN interface for communication with the WAN. Heitmann only discloses a base station arranged between LAN and air interface” and so relies on Godfrey. Godfrey FIG. 22 and related text, especially paragraph [00185] states: “the independently modifiable information at the external data store 2082 (FIG. 22, connected to WAN 2004) may maintain synchronization of a plurality of data stores associated with a user. . . through updates sent to the data store

2082 by the wireless connector system 2078 (Corporate LAN) at certain time intervals, each time an entry in the data store 2017 (Corporate LAN) is added or changed, at certain times of the day or when initiated.” There is no disclosure, for example, of the features of claim 1 of intercepting means, preparing means and forwarding means as amended or anything other than a WAN/LAN synchronization by “certain time intervals” or initiation by a component. Consequently, it is respectfully submitted that the Heitmann/Godfrey combination is silent about the features of claim 8, for example, receiving means, exploiting means, intercepting means, preparing means and forwarding means as amended. Reconsideration and withdrawal of the rejection of gateway claim 8 is respectfully requested.

The Examiner relies primarily on Heitmann, column 5, lines 55-67, for rejecting claim 9/8. Claim 9 has been amended to clarify “global reference time clock” for consistency with “precise global clock GCL” of paragraph [0067]. Again, claim 9 is patentable for at least the reasons that claims 8 and 1 are patentable. Claim 9 also is patentable for the reason that the Examiner admits that “Heitmann fails to disclose local gateway” and thus, his reliance on Heitmann is misplaced for rejecting gateway claim 9. Consequently, reconsideration and withdrawal of the rejection of claim 9/8 is respectfully requested.

The Examiner relies on Godfrey for the features of claim 2 dependent on claim 1: “wherein said intercepting means intercepts said message and said receiving means receives and extracts said second synchronizing data in compliance with the HTTP protocol.” Claim 2 has been thus amended to clarify “second synchronizing data” and is at least patentable for the reasons that claim 1 is patentable. Moreover, Godfrey fails to make up for the deficiencies of claim 1 with respect to the features of claim 2. Firstly, as explained above, Heitmann has no intercepting, preparing and forwarding means features or third clock and neither does Godfrey. Godfrey FIG. 22 and paragraph 185 are relied on for synchronization of data between networks and in particular at paragraph [0185] Godfrey states: “This synchronization may be accomplished, for example, through updates sent to the data store 2082 by the wireless connector system 2078 at certain time intervals, each time an entry in the data store 2017 is added or changed, at certain times of the day, or when initiated at the LAN 2009, by the message server 2020 or a computer system 2022, at the data store 2082,

or possibly by a mobile device 2088, 2090, through the access gateway 2080” . . . “For example, the wireless connector system 2078 may post updates or stored information to a resource in the data store 2082 via an HTTP post request.” Consequently, at best, Godfrey may tie HTTP and synchronization (updates). Heitmann/Godfrey, for example, is silent about the message intercepting feature or extracting “said second synchronizing date in compliance with HTTP protocol.” Consequently, reconsideration and withdrawal of the rejection of claim 2 is respectfully requested.

Claim 3 is rejected on the grounds that Java scripts are shown by Burkes. Claim 3 recites: “wherein said preparing means is intended to prepare the time request in the form of executable scripts, preferably based on Java.” Burkes fails to make up for the deficiency of Heitmann in showing “preparing means for preparing a time request for said apparatus of said second communication network periodically or responsive to a state of said local time clock of said router, said time request being executed in said apparatus of said second communication network . . .” Burkes executes Java on a Java Virtual Machine embedded in the memory 104 (col. 4, lines 31-36). Consequently, Burkes operates its time calibration routine internally, and while there is a time request sent externally, the Java script is not used for such a time request as recited. Reconsideration and withdrawal of the rejection of claim 3/1 is respectfully requested.

Applicants request examination of new claim 12 dependent on claim 1 which recites “wherein said cached, intercepted message (MSG) comprises an HTTP information request message directed to a data server of the first communication network.” None of the references either singly or in combination disclose or suggest this feature. For example, the Heitmann KD1 is communications data, such as voice data, directed to a mobile terminal EG1 that is involved in a handover between two base stations BS2 and BS1. There is, for example, no HTTP information request directed to a data server and no such “cached, intercepted message.”

CONCLUSION

All of the stated grounds of objections and rejections have been properly traversed, accommodated, or rendered moot. Therefore, it is respectfully requested that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It

is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

No fees are believed to be required for this amendment other than the fee under Rule 114 of \$810 for a Request for Continued Examination. If any fees are due in connection with the filing of this Amendment Accompanying a Request for Continued Examination, please charge the fees to Deposit Account 07-0832.

Respectfully submitted,
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